

**Dr. Duke's Phytochemical and Ethnobotanical Databases**

**Chemicals found in *Crataegus rhipidophylla***

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Refernce Citation
30	(+)-CATECHIN	Inflorescence				--
30	(+)-CATECHIN	Bud				--
30	(+)-CATECHIN	Tissue Culture				--
30	(+)-CATECHIN	Leaf				--
30	(+)-CATECHIN	Flower				--
38	(-)-EPICATECHIN	Bud				--
38	(-)-EPICATECHIN	Shoot				--
38	(-)-EPICATECHIN	Leaf				--
38	(-)-EPICATECHIN	Flower				--
38	(-)-EPICATECHIN	Fruit				--
38	(-)-EPICATECHIN	Inflorescence				--
15	5-HYDROXYTRYPTAMINE	Shoot				--
19	ACETYL-CHOLINE	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
11	ADENINE	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
28	ADENOSINE	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
33	AESCULIN	Shoot				--
33	AESCULIN	Fruit				Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
5	ALUMINUM	Fruit		29.0	-0.21508468192276714	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
8	AMYGDALIN	Leaf		1500.0	-0.7071067811865472	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
101	APIGENIN	Fruit				Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. Herbal Medicine - A Guide for Health-care Professionals. The Pharmaceutical Press, London. 296pp.
101	APIGENIN	Bud				--
101	APIGENIN	Leaf				--
112	ASCORBIC-ACID	Leaf		1800.0	-0.27690303367535113	--
112	ASCORBIC-ACID	Fruit		85.0	-0.2792039610917021	--
53	BETA-CAROTENE	Fruit		5.4	-0.14036252642365205	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
1	BETA-PHENETHYLAMINE	Fruit				Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
1	BETA-PHENETHYLAMINE	Flower				--
47	BETA-SITOSTEROL	Leaf	5100.0	6200.0	2.2672781336507843	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
47	BETA-SITOSTEROL	Flower	6500.0	7800.0	0.9253646230843826	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
102	CAFFEIC-ACID	Bud				--
102	CAFFEIC-ACID	Shoot				--
102	CAFFEIC-ACID	Leaf				--
102	CAFFEIC-ACID	Flower				--
102	CAFFEIC-ACID	Inflorescence				--
28	CALCIUM	Fruit		5570.0	0.3954571881842723	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
43	CATECHIN	Fruit				Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
77	CHLOROGENIC-ACID	Bud				--
77	CHLOROGENIC-ACID	Bark				--
77	CHLOROGENIC-ACID	Shoot				--
77	CHLOROGENIC-ACID	Leaf				--
77	CHLOROGENIC-ACID	Inflorescence				--
77	CHLOROGENIC-ACID	Fruit				--
77	CHLOROGENIC-ACID	Flower				--
20	CHOLINE	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
20	CHOLINE	Fruit				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
24	CHROMIUM	Fruit		17.0	1.8801548775573675	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
23	CITRIC-ACID	Fruit				Chemical Constituents of Oriental Herbs (3 diff. books)
2	COBALT	Fruit		20.0	1.8860699698644368	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
2	DIMETHYL-AMINE	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
20	DOPAMINE	Shoot				--
40	EPICATECHIN	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
11	EPINEPHRINE	Flower				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
11	EPINEPHRINE	Leaf				--
29	ESCULIN	Bark				Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
15	FIBER	Fruit		108000.0	-0.31778652128419577	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
7	GLUCOSE	Fruit				Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
1	GUANINE	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
30	HYPEROSEIDE	Bark				--
30	HYPEROSEIDE	Leaf				--
30	HYPEROSEIDE	Inflorescence				--
30	HYPEROSEIDE	Fruit				--
30	HYPEROSEIDE	Shoot				--
30	HYPEROSEIDE	Flower				--
30	HYPEROSEIDE	Branches				--
6	IRON	Fruit				Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
27	LINOLEIC-ACID	Fruit				Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
21	LUPEOL	Bark				--
78	LUTEOLIN	Bud				--
78	LUTEOLIN	Leaf				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
78	LUTEOLIN	Fruit				Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. <i>Herbal Medicine - A Guide for Health-care Professionals.</i> The Pharmaceutical Press, London. 296pp.
65	MAGNESIUM	Fruit		940.0	-0.5509172813412117	Pedersen, M. 1987. <i>Nutritional Herbology.</i> Pederson Publishing. Bountiful, Utah. 377 pp.
14	MANGANESE	Fruit		14.0	-0.31122331625148486	Pedersen, M. 1987. <i>Nutritional Herbology.</i> Pederson Publishing. Bountiful, Utah. 377 pp.
6	MASLINIC-ACID	Shoot				--
39	NIACIN	Fruit				Pedersen, M. 1987. <i>Nutritional Herbology.</i> Pederson Publishing. Bountiful, Utah. 377 pp.
25	OPC	Shoot	10000.0	30000.0		Bisset, N.G., ed. 1994. <i>Herbal Drugs and Phytopharmaceuticals.</i> CRC Press. Boca Raton, FL. 566 pp.
9	OXALIC-ACID	Fruit				List, P.H. and Horhammer, L., <i>Hager's Handbuch der Pharmazeutischen Praxis,</i> Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
9	OXALIC-ACID	Bark				--
13	PALMITIC-ACID	Fruit				Pedersen, M. 1987. <i>Nutritional Herbology.</i> Pederson Publishing. Bountiful, Utah. 377 pp.
13	PALMITIC-ACID	Bark				--
24	PECTIN	Leaf				List, P.H. and Horhammer, L., <i>Hager's Handbuch der Pharmazeutischen Praxis,</i> Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
4	PHOSPHORUS	Fruit		1450.0	-0.5364028420241324	Pedersen, M. 1987. <i>Nutritional Herbology.</i> Pederson Publishing. Bountiful, Utah. 377 pp.
14	POTASSIUM	Fruit		11000.0	-0.6119284601203993	Pedersen, M. 1987. <i>Nutritional Herbology.</i> Pederson Publishing. Bountiful, Utah. 377 pp.
11	PROCYANIDIN	Leaf				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
11	PROCYANIDIN	Fruit				Pedersen, M. 1987. Nutritional Heriology. Pederson Publishing. Bountiful, Utah. 377 pp.
1	PROCYANIDIN-B-2	Fruit				--
6	PYCGOGENOL	Shoot	10000.0	30000.0		Bisset, N.G., ed. 1994. Herbal Drugs and Phytopharmaceuticals. CRC Press. Boca Raton, FL. 566 pp.
176	QUERCETIN	Inflorescence				--
176	QUERCETIN	Shoot				--
176	QUERCETIN	Flower				--
44	QUERCITRIN	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
15	RIBOFLAVIN	Fruit				Pedersen, M. 1987. Nutritional Heriology. Pederson Publishing. Bountiful, Utah. 377 pp.
87	RUTIN	Bud				--
87	RUTIN	Leaf				--
87	RUTIN	Inflorescence				--
5	SAPONINS	Fruit				Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. Herbal Medicine - A Guide for Health-care Professionals. The Pharmaceutical Press, London. 296pp.
60	SELENIUM	Fruit		20.0	4.573340641912426	Pedersen, M. 1987. Nutritional Heriology. Pederson Publishing. Bountiful, Utah. 377 pp.
4	SILICON	Fruit				Pedersen, M. 1987. Nutritional Heriology. Pederson Publishing. Bountiful, Utah. 377 pp.
1	SODIUM	Fruit		55.0	-0.17873519822623876	Pedersen, M. 1987. Nutritional Heriology. Pederson Publishing. Bountiful, Utah. 377 pp.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
11	SORBITOL	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
5	STARCH	Fruit	150000.0	180000.0	-0.18166262454346976	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
8	STEARIC-ACID	Bark				--
14	SUCROSE	Bark				--
6	TARTARIC-ACID	Bark				--
6	TARTARIC-ACID	Fruit				Chemical Constituents of Oriental Herbs (3 diff. books)
31	THIAMIN	Fruit				Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
4	TIN	Fruit		13.0	-0.3261703903199725	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
1	TRIMETHYLAMINE	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
11	TYRAMINE	Fruit				Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
11	TYRAMINE	Flower				--
89	URSOLIC-ACID	Shoot				--
89	URSOLIC-ACID	Leaf				List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
18	VITEXIN	Branches				--
18	VITEXIN	Flower				--
18	VITEXIN	Bark				--
18	VITEXIN	Inflorescence				--
18	VITEXIN	Leaf				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
18	VITEXIN	Fruit				--
18	VITEXIN	Shoot				--
1	VITEXIN-2'-O-RHAMNOSIDE	Inflorescence				--
77	ZINC	Fruit				Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.